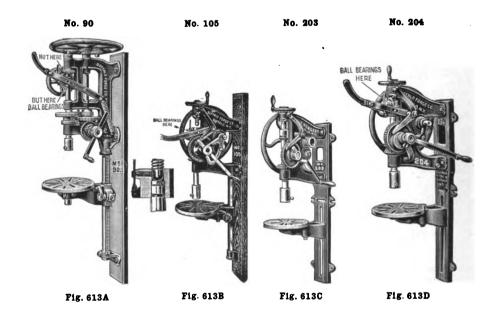
### Buffalo Forge Co. 1911

### BUFFALO BLACKSMITHS' POST DRILLS

### BALL BEARING



Number	*90	*90A	*90B	*900	*900	†105	‡201	‡202	‡203	‡204
Size Hole will Drill inches	13/4	13/4	$\frac{13}{4}$	$\frac{13/4}{22}$	13/4	11/2	1	1	11/2	1½ 23
Drills to Center of Circle "	22	22	22	22	22	18	18	18	23	
Takes Straight Drill Shank. "	41	64	41	41	41 64	1/2	1/2	1/2	1/2	11/4
Diameter of Spindle "	11/8	11/8	11/8	11/8	11/8	$\frac{1}{2}$ $1\frac{1}{4}$	11/8	11/8	11/4	11/4
Length Feed Run "	6	6	6	6	6	4	31/4	31/4	4	4
Length Drill over all "	74	74	74	74	74	50	44	44	48	50
Size of Pulley "							51/2	51/2	8	8
Weightpounds	325	325	325	325	325	145	90	92	140	145
Price. Hand Power, Lever Feed, each	55.00					38.00	23.00	25.00	28.00	30.00
" with Tight and Loose Pulley " and		60.00				42.00	26.00	29.00	32.00	34.00
" " " " and										
Countershaft			70.00							
" with Cone Pulley "										
" with Cone Pulley and Countershaft "										

\*These drills equipped with planetary gears to the flywheel which give flywheel 3 times as great speed as the old style. Ball-bearings placed just beneath flywheel and at end of spindle which greatly reduces the friction. Automatic, hand and lever feed, two speeds for drilling and three for automatic feed. On special order bored for \$\frac{5}{6}\$ or \$\frac{1}{2}\$-inch. †All parts jig made and interchangable. Two speeds, slotted and adjustable table,

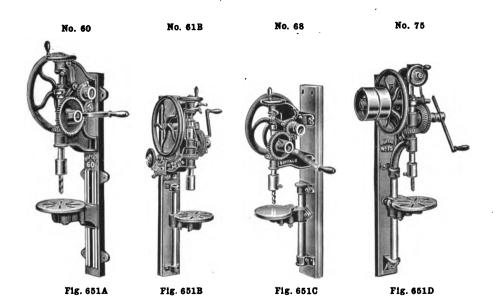
lever feed, quick return, pin clutch, adjustable automatic feed.

†These drills are provided with a rigid, ribbed iron back. On special order will be bored for 5% or \$1 inch.



### BUFFALO BLACKSMITHS' POST DRILLS

### BALL BEARING



Number	60	61B	68	69	71	74	75
Size of Hole Will Drillinches		1½ 16	1	7/8	$\begin{array}{ c c c }\hline 1\frac{1}{4}\\ 12\\ \end{array}$	11/4	11.4 15
Drills to Center of Circle "	17		15	10		15	
Takes Straight Shank Drills "	/2	1/2	1/2	3 <sup>1</sup> / <sub>4</sub> 35	1/2	1/2	1/2
Length Feed Run "	41/4	414	31/4	31/4	5	5	5
Length Drills over all "	42	48	44		54	60	60
Weightpounds	135	125	100	54	130	200	210
Price, Hand Power each	32.00	34.00	22.00	12.50	36.00	48.00	52.00
" With Tight and Loose Pulleys "	36.00	38.00	26.00	<b></b> .	40.00	52.00	56.00

No. 60 Iron Back. For hand power only.

" 68 Wood " " " "

Nos. 61B and 74. Hand power only with emery wheel.

- " 69 Hand power only.
- " 71 Automatic feed. Triple gear.
- " 75 Automatic feed. Triple gear, tight and loose pulleys.



### **BUFFALO PORTABLE FORGES**

No. O. BLACKSMITHS' FORGE

No. 1. MACHINISTS' FORGE





Fig. 6927A

Number of Forge	0	1	2
Price, without Water Tankeach	50.00	40.00	42,00
" with " ""	54.00		
Size of Hearth inches	$28 \times 40$	21 x 27	$21 \times 27$
Height to Top of Bowl "	32	31	31
Diameter of Fan "	14	10	10
Weight without Tankpounds	340	150	155

No. 2 Forge same as No. 1 with closed hood. No. 0 Forge is guaranteed to produce a welding heat on 3-inch iron in five minutes, and 4-inch iron in ten minutes.

No. 3. BOILER MAKERS' FORGE

No. 4. HALF OPEN HOOD

No. 5. RIVET FORGE









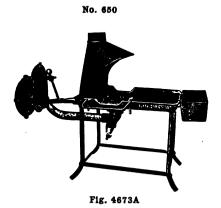
6927E

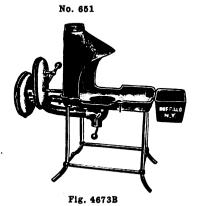
116. 03210	115. 00211		118. 00212		
Number of Forge	3	4	5	6	
Priceeach Diameter of Hearth inches Height to Top of Bowl " Diameter of Fan " Weight pounds	36.00 21 x 27 31 10 145	27.00 18 33 6 75	24.00 18 33 6 70	30.00 18 33 6 80	

No. 6 Forge same as No. 4, with closed hood.

### **BUFFALO PORTABLE FORGES**

### WITH GEARED HAND BLOWERS





Numb	er		650	651
		e Paninches Fop of Fire Pan"	28x40 32	23x30 30
Diame	ter o	of Fan Case "	12	12
			275 50.00	195 40.00
"	44	" " and Water Tank "	54.00	44.00
66 66	"	Closed Hood		42.00
••	••	Dash "		37.00

# Fig. 4673C

### Nos. 626 AND 627, RIVET FORGES

Number	626 and 627	626A and 627A	626B and 627B
Diameter of Fire Paninches	18	22	24
Height to Top Fire Pan. "	32	32	32
Diameter of Fan Case "	12	12	12
Weight, Half Hoodpounds	120	130	140
" Closed Hood "	130	140	150
Price, Half Hood each	38.00	43.00	45.00
" Closed " "	40.00	45.00	50.00

No. 627 Series is fitted with Closed Hood. All Buffalo Forges can be fitted with electric motors if customer so desires at special prices.

### **BUFFALO PORTABLE FORGES**

### RIVET FORGES

No. 625 WITH GEARED HAND BLOWER



Fig. 4674A

No. 625E WITH SPECIAL ELECTRIC BLOWER



Fig. 4674B

Number	625	625A	625B	*625E
Diameter of Fire Paninches	18	22	24	18
Height to Top of Fire Pan "	32	32	32	32
Depth of Fire Pan "	6	6	6	6
Diameter of Fan Case "	12	12	12	12
Weightpounds	110	120	130	130
Priceeach	35.00	38.00	41.00	l
" with Direct Current Motors "			l	40.00
" " Alternating " " "				44.00

If desired with Ring Base, add 2.00.

### No. 22C COMPRESSED AIR FORGES



Fig. 4674C



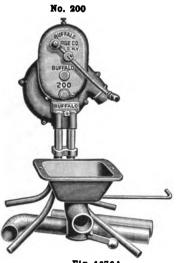
Fig. 4674D

Number	22C	22AC	22BC	22CC	22DC	23C	23AC	23BC	23CC	23DC
Diam. of Fire Pan inches	18	20	22	24	28	24	18	20	22	28
Height to Top of Fire Pan "	32	32	32	32	32	32	32	32	32	32
Depth of Fire Pan "	6	6	7	7	7	10	6	6	7	10
Weight pounds	40	43	47	50	60	90	50	60	75	100
Priceeach	20.00	22.00	24.00	26.00	30.00	28.00	22.00	24.00	26.00	32.00

These Forges will operate perfectly on from 5 to 10 pounds pressure of compressed air. The expense of operating for one year is 5.00.

<sup>\*</sup>In ordering always specify whether direct or alternating current is desired.

### **BUFFALO GEARED HAND BLOWERS**





No. 201

F12.	4676	A

Fig. 4676B

Number	200	201
Height to Crankinches	41	41
Diameter of Fan Case "	12	12
Size of Tuyere	11x9x4	111/2x9x4
Weight of Blowerpounds	72	72
" " Tuyere"	36	36
Price, with H. H. Tuyereeach	37.00	37.00
" without Tuyere "	35.00	35.00
" H. H. " only"	5.00	5.00



No. 98 HAND BLOWER

Number	98 and 99
Height to Crank Shaft, Adjustableinches Diameter of Fan Case	38 to 44 12
Shipping Weight, with Tuyerepounds without Tuyere	
Price, without Tuyereeach	33,00
" with Regular Tuyere " " Side and Center Blast	
Tuyere No. H. H	35.00

Any of the above Blowers will be furnished with Single Column Cast Iron Stand without extra cost.

### POSITIVE PRESSURE BLOWERS

### HAND BLOWER



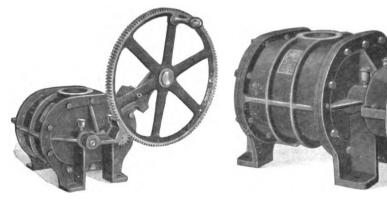


Fig. 5531A

Fig. 5531B

### HAND BLOWERS

Number	Capacity per Revolution Cubic Inches	Diameter of Outlet Inches	Diameter of Hand Wheel Inches	Size of Platform Required Inches	Shipping Weight Pounds	Price Each
35	173	21/2	14	7½ x 10	100	24.00

These blowers are built for bottom discharge.

### POWER BLOWERS

Number	Capacity per Revolution Cubic Inches	Diameter of Outlet Inches	Revolutions per Minute	Size of Pulley Inches	Shipping Weight Pounds	Price with Single Pulley Each	Price with Tight and Loose Pulleys Each
35 40 50	173 288 376	$\frac{21/2}{21/2}$	800 to 1200 500 # 800 300 " 600	$\begin{array}{c} 7 \times 11_{2} \\ 8 \times 2 \\ 10 \times 21_{2} \end{array}$	90 135 200	22.50 35.00 60.00	24.00 37.00 62.50

The power required is proportional to the pressure and is based on  $\frac{1}{2}$  horse power to displace 100 cubic feet of free air per minute against a pressure of 1 pound per square inch. For laundries, sand blast, forges, gas furnaces, oil furnaces, etc.

These Blowers have steel shafts and bronze bearings.

All parts are interchangeable.

Standard machines are built for Top Discharge, but can be made for Bottom Discharge, if desired.

The hand blower is built for bottom discharge.



### **BUFFALO STEEL PRESSURE BLOWERS**



Pig. 6926A

							ADJUSTA	BLE BED
Number	Height of Blower Inches	Diameter of Outlet Inches	Diameter of Pulley Inches	Face of Pulley Inches	Price without Counter- shaft Each	Price with Counter- shaft Each	Price with Bed but without Counter- shaft	Price with Bed and with Counter- shaft
1	12½	31/2	21/4	13/	12.00	20.00		
7	1517		037	1¾ 2¼ 2¾ 28		28.00		•••••
2	1514	4	234	274	18.00			•••••
. 3	191/4	434	3	2%	26.00	38.00		
4	231/2	5	4	3	36.00	52.00	l	<b></b>
5	25%	53%	41/4	3	44.00	64.00		l <b>.</b>
6	2934	$6\frac{1}{4}$	412	31/6	55.00	80.00	90.00	120.00
ž	3314	714	5	3½ 4½ 4½ 4½	70.00	105.00	100.00	135.00
8	38	714 834	6 7	412	90.00	135.00	130.00	175.00
9	44	10	1 7	5	115.00	175.00	170.00	230.00
10	56	121/4	8	$5\frac{3}{4}$	160.00	240.00	265.00	350.00
11	651/2	141/2	81/2	61/2	225.00	315.00	330.00	435.00
111/2	75%	161/2	10	7	275.00	375.00	380.00	500.00
12	75 5%	18	10	8	325.00	435.00	475.00	625.00

Nos. 1 to 6 Blowers, inclusive, have one pulley; Nos. 7 to 12 have two pulleys.

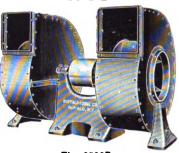
### TABLE OF SPEEDS AND CAPACITIES AS APPLIED TO CUPOLAS

Number of Blower	Diameter Inside of Cupola Inches	Pressure in Ounces	Speed No. of Revolu- tions per Minute	Melting Capacity in Pounds per Hour	Cubic Feet of Air Required per Minute	Pressure in Ounces	Speed No. of Revolu- tions per Minute	Melting Capacity in Pounds per Hour	Cubic Feet of Air Required per Minute
4	18	8	4732	1545	666	9	5030	1647	717
4 5	23	8	4209	2321	773	10	4726	2600	867
6	27	8	3660	3093	951	10	4108	3671	1067
7	32	8	3244	4218	1486	10	3642	5000	1668
8	37	8	2948	7500	2199	10	3310	8800	<b>246</b> 9
9	42	10	2785	10000	3000	12	3260	12000	3000
10	48	10	2195	14000	4500	12	2413	17000	5000
11	60	12	1952	22000	6500	14	2116	26000	8000
111/2	70	12	1647	30000	8500	14	1797	35000	10000
12	84	12	1625	40000	10000	14	1775	45000	12000

### STEEL PLATE SINGLE AND DOUBLE PLANING MILL EXHAUSTERS







DOUBLE

Fig. 9599A

Fig. 9599B

### SINGLE

Size Inches	Diameter of of Inlet		OUTLET HES	Single Far Inch		Width of Fan	Price Each
Inches	Inches	Width	Height	Diameter	Face	Inches	LACH
30	12	11	11	6	41.2	3214	55.00
35	14	$12^{1.5}$	121/2	7	513	361/4	70.CO
40	16	14	14	8	61.5	395/8	90.00
45	18	16	16	9	7).3	431/3	115.00
50	20	18	18	10	$8i.\overline{5}$	471/4	150.00
55	22	$19_{12}$	191/3	11	$91\frac{7}{2}$	51	185.00
<b>6</b> 0	24	21 ~	21	12	1013	54	200.00
70	28	25	25	14	$11^{1}.5$	603/4	250.00
80	32	28	28	· 16	$12^{1\frac{7}{3}}$	6434	300.00

### DOUBLE

Size Inches	Diameter of Inlet	Size of Inc	OUTLET HES	Double F.	AN PULLEY	Width of Fan	Price Each	
inches	Inches	Width	Height	Diameter	Face	Inches	Lacu	
30	12	11	11	6	61.,	473/8	90.00	
35	14	121.5	$12^{1}$ $\%$	7	$71\overline{5}$	521	100.00	
40	16	14	14	1 8	$8\frac{1}{2}$	581/2	130.00	
<b>4</b> 5	18	16	16	10	9i <u>.</u>	$641\sqrt{3}$	170.00	
50	20	18	18	12	101/2	703/4	210.00	
55	22	$19^{1}_{2}$	1914	13	$11^{1}_{2}$	757%	275.00	
60	24	21	21	14	$12^{\frac{1}{2}}$	82	325.00	
70	28	25	25	16	14 ~	9215	400.00	
80	32	28	28	20	16	$1001\frac{7}{2}$	500.00	

These exhausters have a reversible housing; adjustable to either hand and to any direction of discharge. All the adjustments are made in a few minutes and on the outside of the housing. To change the direction of discharge just loosen the eight bolts in the ring of each pedestal; then revolve the housing until the discharge points in the desired direction. To change the hand remove these bolts, loosen the set screw holding the fan to the shaft, then shift the pedestals. This operation is quickly and easily done.

### **BUFFALO** PUNCHES, SHEARS, AND ANGLE CUTTERS

PUNCH No. 12B COMBINED PUNCH AND SHEARS No. 2B

ARMOR PLATE ANGLE CUTTER







Pig. 6762B



Pig. 6762C

### PUNCHES AND SHEARS

Number	*11	*11B	12	12B	13
Capacityinches	1/8X1/8	1/8X1/8	1/8X1/8	1/8×1/8	1/4×1/4
Size Punches Furnished "	3 and 1/8	3 and 1/8	3 and 1/8	3 and 1/8	1/8 and 1/4
Depth Throat "	4	4	4	4	4
Weight pounds	26	26	26	26	80
Price, Front Lever, no Stand each	15.00				
" Rear " " " "		15.00			
" Front " with " "			20.00		40.00
" Rear " " " "				20.00	
Number	14	†13B	†14B	†15B	2B
Capacityinches	3/8X3/8	1/4×1/4	3/8X3/8	5/8x1/2	1/4×1/4
Size Punches Furnished "	5/6 and 3/8	1/8 and 1/4	5/6 and 3/8	14,3/8 & 1/2	1/8, 3/6 & 1/4
Depth Throat "	41/4	4	41/4	51/2	4
Weight pounds	130	80	130	245	125
Price, Front Lever, with Stand each	50.00				*****
" Rear " " " "		40.00	50.00	70.00	50.00

<sup>\*</sup>Mounted on wood blocks for bench use. Balance of punch stands are cast iron, armour plate frame, drop forged steel fittings. Nos 13 and 14 on special order built with rear lever. †Back lever similar to No. 2B. but larger capacity.

Nos. 3B and 4B same construction as 2B,

### ARMOR PLATE ANGLE CUTTERS

Cuts angles  $2\frac{1}{2}x\frac{2}{4}$  inches. Weight 200 pounds, Armor plate frame, crucible steel knives, forged steel levers and links. Price, each, 40.00

### ARMOR PLATE SLITTING SHEARS

No. 2



Pig. 9498A



Fig. 9498B

Number	2	3	21	22
Shears Sheet Metal, Gauge No	10	8	••••	
Shears Plates, Thickness inches		1	3/4	1/4
Cuts Flat Bars "	1/4 x 3 1/4	5/6 x 31/2 11/2 x 11/2 x 3/6	2½ x 3/6	21/2x 1/6
Cuts Tees "	,4,,4	116 x116 x36	,,,,,	72 710
Weight pounds	160	200	75	115
Priceeach	60.00	80.00	60.00	80.00

## Fig. 9498C

### **PYGMY**

Number	0
Shears Sheet Metal, Gauge No	20
Cuts Flat Bars inches Weight pounds	¹/ <sub>6</sub> x3 50
Priceeach	20.00

Stop for just a moment and think what it means to have your punches, shears, angle and tee cutters, etc., built of armor plate steel instead of cast iron. No more cast iron flaws or broken machines because it happens to be a cold morning.

Armor-plate steel is the toughest and strongest material known.

Unlimited strength and the highest degree of efficiency, combined with lighter

weight make these the best machines on earth.

They are absolutely indestructible and are equipped with the highest power leverage known to mechanical science. They are accurate in their work, easy in operation and can always be depended upon to perform any work, from the lightest up to their maximum capacity.

The tensile strength of cast iron is 10,000 pounds, and of armor-plate steel 75,000 Think this over. It means a considerable saving in weight and space and a

tremendous gain in strength and efficiency.

Armor-plate steel, with its extraordinary strength and elasticity, is well adapted to meet the sudden heavy and irregular strains this class of tool is subjected to.